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IN THE SPECIFICATION

Amend Paragraph 18, as follows:

The drive shaft housing 15 is connected to a steering shaft (not shown) that is journalled for steering movement about a generally vertically extending axis in a swivel bracket 18 in a manner well known in the art. The swivel bracket 18 is pivotally connected to a clamping bracket 19 by a pivot pin 21, in a manner that is also well known in the art. The clamping bracket 19 is suitably connected to the transom of a watercraft hull 22, operating in a body of water ~~23~~ L.

Amend Paragraph 20, as follows:

Referring now primarily to FIG. 2, the tilt and trim unit 13 is comprised of a hydraulic cylinder housing, indicated generally at 23, having one end pivotally connected to the clamping bracket 19 on the hull 22 by a pivot shaft 24. The cylinder housing 23 forms a cylinder bore 25 that is divided by a piston 26 into first and second pressure oil chambers 27 and 28. A piston rod 29 is fixed to the piston 26 and extends through the chamber 28 and out of the cylinder housing 23 where it is connected by a pivot shaft 31 to the swivel bracket 18. By pressurizing the chamber 27 and exhausting the chamber 28 the outboard motor 12 will move for upward tilting action U. Conversely pressurizing the second pressure oil chamber 28 and exhausting the chamber 27 will effect the outboard motor 12 to move downward for returning action D. The construction and operation of the unit 13 is well known in the art and thus further description except for its pump, next to be described, is not believed necessary. This is particularly true since the use of the pump is not so limited.

Amend Paragraph 21, as follows:

The pump, indicated generally by the reference numeral 32, comprises an intermeshing gear pump supported by threaded fasteners 33 on the cylinder 23, a reversible electric motor 34 for driving the gear pump 32, and, indicated generally at 35 for introducing oil which is a pressurized fluid delivered from the gear pump 32 driven by the electric motor 34 into the cylinder 23.

Amend Paragraph 22, as follows:

The gear pump 32 is supported by the threaded fasteners 33 on the cylinder 23 and comprises a housing assembly 30, made of an iron-based sintered metal, constituting the outer shell of the gear pump and defining a pumping cavity, indicated generally by the reference numeral 36, see now additionally FIGS. 3-5. A pair of spur gears 37, 38 are contained in the pumping cavity 36 with their axial centers 39, 41 disposed parallel, and meshing with each other. Shaft receiving holes 42, 43 are formed in the housing assembly 30 and the gears 37, 38 on the axial centers 39, 41. Supporting shafts 44, 45 are inserted in these shaft holes 42, 43 and journalled at both ends on the housing assembly 30 for

supporting these gears 37, 38 for rotation about the axial centers 39, 41. At least either one of these supporting shafts 44, 45 is driveably connected to the reversible electric motor 34. The gears 37, 38 are of the same shape and the same size and their flat end faces are flush with each other.

Amend Paragraph 23, as follows:

The internal surface of the pumping cavity 36 is formed by a pair of inside cylindrical surfaces 46, 47 that extend parallel to the axial centers 39, 41 and directly face the two gears 37, 38 in close proximity to the outside surfaces thereof. This forms a generally figure 8 shaped recess facing directly the outside circumferential surfaces of the two gears 37, 38 in close proximity thereto.

Amend Paragraph 24, as follows:

The housing assembly 30 is made up of first, second and third pieces 48, 49, 51, each of a flat plate-like shape. These pieces 48, 49 and 51 are stacked together in this order in direct contact with the piece 49 forming the main pump body and the pieces 48 and 49 forming upper and lower end closures therefore. Threaded fasteners 52 detachably fix these first, second and third pieces 48, 49, 51 together. However locating pins 53 position the first, second and third pieces 48, 49, 51 to each other prior to the fixing by the threaded fasteners 52. In addition the threaded fasteners 33 fix the first, second and third pieces 48, 49, 51 together when the gear pump 32 is supported on the cylinder 23, and thus have the same function as the threaded fasteners 52.

Amend Paragraph 25, as follows:

The threaded fasteners 33 pass through holes 54 provided through the housing assembly 30 parallel to the axial centers 39, 41 and are screwed into taped openings formed in the cylinder 23. In a similar manner the threaded fasteners 52 pass through holes 55 provided through the first and second pieces 48, 49 parallel to the axial centers 39, 41, and are received in tapped openings 56 formed in the third piece.

Amend Paragraph 26, as follows:

The locating pins 53 are positioned in aligning holes 57 provided in the first, second and third pieces 48, 49, 51 be parallel to the axial centers 39, 41. As already noted and insertion of the locating pins 53 into the aligning holes 57 allows the first, second and third pieces 48, 49, 51 to be positioned accurately to each other.

Amend Paragraph 27, as follows:

A coupling device, indicated generally at 58, is provided for coupling the gears 37, 38 and the respective support shafts 44, 45 so that the gears 37, 38 rotate with the support shafts 44, 45, respectively. The coupling means 58 is shown best in FIG. 5 and comprises coupling grooves 59

formed on one flat face of the gears 37, 38 adjacent the housing piece 48. Theses grooves 59 receive the ends of coupling pins 61 that penetrating radially through suitable openings formed in the support shafts 44, 45. The pins 61 are inserted in the coupling grooves 59 with a small play in a clearance-fit relation.

Amend Paragraph 29, as follows:

Referring now primarily to FIG. 3 and also FIG. 4, the oil introducing device and reservoir 35 comprises a pair of oil passages 62 and 63 are formed in lower end plate 51 of the housing assembly30. The oil passage 62 allows the area of one of two portions of the pumping cavity36formed on both sides of the mutual meshing portion of the gears 37, 38 to communicate with the outside of the housing assembly 30. The other oil passage 63 allows the other of two portions of the pumping cavity 36 to communicate with the outside of the housing assembly 30. The passages 62 and ~~62~~ 63 communicate with these portions of the pumping cavity 36 through recesses 64 and 65, respectively, formed in the lower face of the main housing portion 49.

Amend Paragraph 30, as follows:

In addition to the oil passages 62 and 63, the oil introducing device 35 comprises still another two oil passages 66 and 67 for providing communication of the recesses 64 with a reservoir 68 of the device 35. Ball type check valves 69 in enlargements of the lower end plate passages 66 and 67 permit the drawing of make up fluid from the reservoir 68.

Amend Paragraph 34, as follows:

Next, by principal reference to FIG. 6, which should also be compared to FIG. 3, a method of forming the gear pump 32 will be described, as this constitutes an important feature of the invention. In FIG. 6, work pieces that will eventually become the main body housing 49, and the upper and lower end closures 48 and 51. These work pieces before machining are indicated in FIG. 6 by the reference numerals 81, 82 and 83, respectively. That is the work piece 81 will become after machining the main body housing 49 and the work pieces 82 and 83 will become the upper and lower end closures, respectively.

Amend Paragraph 35, as follows:

First, second and third work pieces 81, 82, 83 are formed each having the same thickness and size as the respective final housing pieces 48, 49, 51. However, for reasons that will shortly become apparent, the work pieces are initially stacked and retained in an order different from their final assembled positions. They are stacked together in the order of the second, the first and the third work pieces 82, 81, 83 in direct contact and fixed together by a suitable mechanism.

Amend Paragraph 36, as follows:

Then, the shaft holes 42, 43 are machined with a tool such as a pair of drills_84 from the lower side of the third work piece_83 through the first work piece_81 toward the upper side of the second work piece_82. In this case, when the shaft holes 42, 43 are drilled in the second work piece_82, burrs indicated at 85 are normally produced at the edges of the holes on the ending side of the drilling operation. However, the shaft holes 42, 43 are not necessarily machined through the upper side of the second work piece_82 to practice the invention.

Amend Paragraph 37, as follows:

Then, in the second work piece_82 is machined, with another cutting tool to form the pumping cavity_36 having a constant cross-sectional shape in the direction of depth, through the entire thickness of the second work piece_82. This machining is preferably continued into the first work piece_81 on the side adjacent the second work piece_82_to form a recess 86 of the same cross-section in shape and size as the pumping cavity_36 but preferably of lesser axial length. In this case, the burrs 85 are automatically eliminated in association with the formation of the pumping cavity_36.

Amend Paragraph 38, as follows:

The bolt through holes 54 and locating pin holes 57 are formed in the first, second and third work pieces 81, 82, 83 to form the first, second and third pieces_48, 49, 51. These pieces are then separated to perform the threading operation in the piece 83 and the oil passage drilling operation and such other machining in the main body work piece 82 and lower end closure work piece 83 as required.

Amend Paragraph 39, as follows:

Then the resulting pump pieces are rearranged in their final order. After that, the gears 37, 38, support shafts 44, 45, coupling means 58 and knock pins 56 are incorporated in these pieces and then the first, second and third pieces_48, 49, 51 are put together directly in this order and fixed with the threaded fasteners_52. The formation of the gear pump 32 is thereby completed.

Amend Paragraph 40, as follows:

Because of this arrangement, the inside surfaces 46, 47 of the pumping cavity_36 face directly the outside surfaces of the gears_37, 38. As previously noted, in the prior art, sliding plates are provided between the end faces of the gears 37, 38 and the inside surfaces 46, 47 of the pumping cavity_36. That is not necessary here since no fillet results at the bottom of the pumping cavity 36. Therefore in this invention, the size of the housing assembly_30 can be decreased, that is, the size of the gear pump 32 can be decreased.

Amend Paragraph 41, as follows:

Therefore, in forming the housing assembly_30, a hole having the same cross-section in shape and size as the pumping cavity_36 when viewed in the direction of the axial centers 39, 41 is first machined through a flat plate member of the same thickness as the second piece_49 to form the second piece_49. Then the first, second and third pieces_48, 49, 51 are put together in this order, so that the inside surfaces 46, 47 of the pumping cavity_36 are defined by the first and third pieces_48, 51, and the inside circumferential surface 38 of the pumping cavity36 by the second piece49, that is, the piece30 containing the pumping cavity_36 is formed.

Amend Paragraph 42, as follows:

In this case, it can be ensured more reliably in association with the formation of the pumping cavity_36 that corners of the opening ends of the pumping cavity_36 open to the outsides from the second piece 49 are shaped to be right angular. Therefore, the corners of the pumping cavity_36 defined by the inner surfaces 46, 47 and the inside circumferential surface 38 can be each formed into a right angular shape more reliably. Thus, if the peripheral corners of the gears_37, 38 are shaped to be right angular and the inside corners and the peripheral corners are fitted together, clearances between the peripheral corners and the inside corners can be significantly decreased compared with when they are shaped in arcs and fitted together.

Amend Paragraph 43, as follows:

Therefore, partial return of pressure oil from the delivery side to the suction side through the foregoing clearances in the prior art constructions is prevented. Thus during operation of the gear pump 32 the pressure of the pressure oil delivered from the gear pump 32 can be increased to a sufficiently high value. Also, because the mating surfaces of the first, second and third housing pieces_48, 49, 51_are flat these outside surfaces can be easily formed with high accuracy, which allows easy formation of the gear pump 32.

Amend Paragraph 44, as follows:

Also as described above, the gears 37, 38 are formed with shaft holes 42, 51 on the axial centers 39, 41, and the support shafts 44, 45 are inserted in the shaft holes 42, 43. Therefore, since it is ensured that corners defined by the outside surfaces of the gears 37, 38 and the outside circumferential surfaces of the support shafts_44, 45 can be shaped to be right angular. Thus the corners of the opening ends of openings of the shaft holes 42, 43_into to the pumping cavity36 are shaped to be right angular and the corners of the gears and those of the opening ends of openings of the shaft holes are fitted together, clearances between these corners can be significantly decreased compared with when they are formed

into arcs and fitted together.

Amend Paragraph 46, as follows:

Also as described above, gears 37, 38 and support shafts 44, 45 are rotatable relative to their axial centers 39, 41, and coupling means 58 is provided for coupling the gears 37, 38 and the support shafts 44, 45 without fixing to each other such that said gears 37, 38 rotate with said support shafts 44, 45. Therefore little play is produced between the gears 37, 38 and the support shafts 44, 45, even if a forming error is produced in the degree of right angularity between the inside surfaces 46, 47 of the pumping cavity_36 and the axial centers 39, 41 of the support shafts 44, 45, this error is absorbed by the foregoing play, and the inside surfaces 46, 47 of the pumping cavity_36 can be brought close to the gears 37, 38 throughout their outside surfaces in close contact, so that clearances between the inside surfaces 46, 47 of the pumping cavity_36 and the outside surfaces of the gears 37, 38 can be significantly decreased.